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FILE 'HCAPLUS' ENTERED AT 11:04:59 ON 01 APR 2005
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FILE COVERS 1907 - 1 Apr 2005  VOL 142 ISS 15
FILE LAST UPDATED: 31 Mar 2005  (20050331/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


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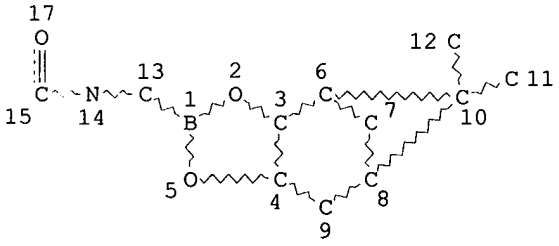


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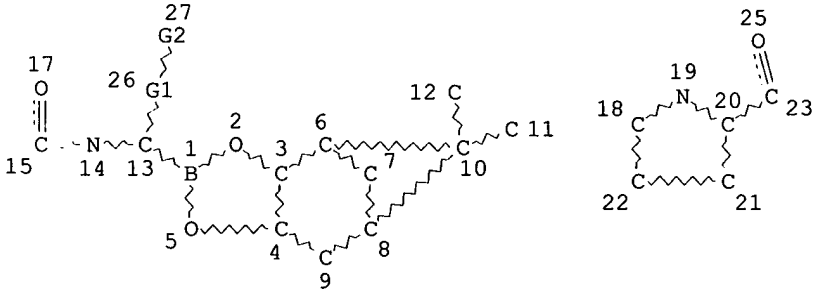

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STEREO ATTRIBUTES: NONE
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L33 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:216826 HCAPLUS
TITLE: Preparation of boronic acids and esters as proteasome inhibitors for inducing apoptosis and treating cancer
INVENTOR(S): Bernareggi, Alberto; Cassara, Paolo G.; Chatterjee, Sankar; Ferretti, Edmondo; Iqbal, Mohamed; Menta, Ernesto; Messina Mclaughlin, Patricia A.; Oliva, Ambrogio
PATENT ASSIGNEE(S): Cephalon, Inc., USA; Sede Secondaria Della Cell Therapeutics, Inc.
SOURCE: PCT Int. Appl., 328 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005021558	A2	20050310	WO 2004-US26407	20040813

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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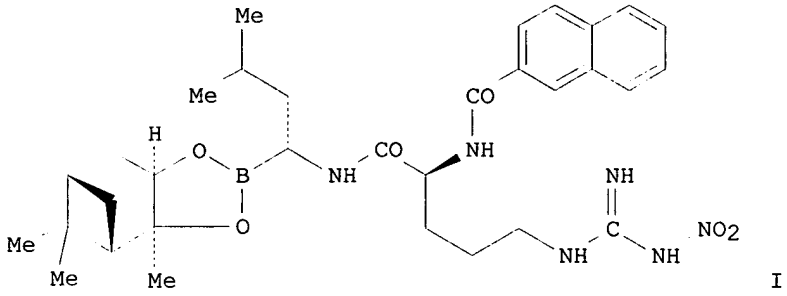


I

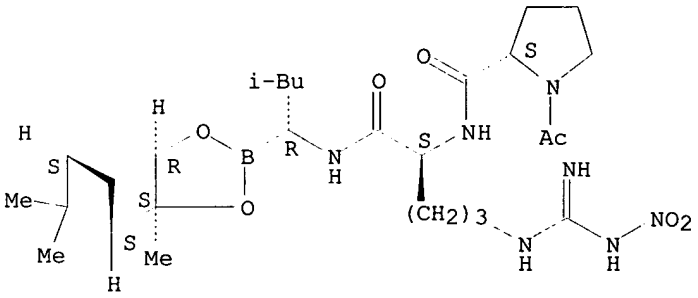
AB The present invention provides boronic acid compds. and boronic esters (XNHCHR2C(O)NH((R)-CH(CH2R1)Q) (I); variables defined below; e.g. N-[(1S)-1-[[[(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-3-methylbutyl]amino]carbonyl]-4-[[(imino)(nitroamino)methyl]amino]butyl]naphthalen-2-carboxamide (shown as II)) and compns. thereof that can modulate apoptosis such as by inhibition of proteasome activity. Semiquant. IC50 values for human erythrocyte proteasome and EC50 values in the MOLT-4 cell line are tabulated for a large number of I. The compds. and compns. can be used in methods of inducing apoptosis and treating diseases such as cancer and other disorders associated directly of indirectly with proteasome activity. For I: R1 is C1-C8 alkyl, C2-C8 alkenyl, C2-C8 alkynyl, or C3-C7 cycloalkyl; R2 is H, (CH2)aCH2NHC(:NR4)NHY, (CH2)bCH2CONR5R6, (CH2)cCH2N(R4)CONH2, (CH2)dCH(R7)NR9R10, or -(CH2)eCH(R7)ZR8; a, b, and c = 0-6; d and e = 0-4. Q is B(OH)2, B(OR14)2, or a cyclic boronic ester wherein said cyclic boronic ester contains 2-20 C atoms, and, optionally, a heteroatom which can be N, S, or O; X is RAC(O), RANHC(O), RAS(O)2-, RAOC(O)-, RASC(O)-, or RA; addnl. details including provisos are given in the claims. Methods of preparation of I and intermediates are claimed and many example prepns. are included. For example, N-[(1S)-1-[[[(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-3-methylbutyl]amino]carbonyl]-4-[[(imino)(nitroamino)methyl]amino]butyl]decanamide was prepared in 72 % yield from decanoic acid in anhydrous DMF, HATU, HOAt, N-methylmorpholine and N-[(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-3-methylbutyl]-(2S)-2-amino-5-[[(imino)(nitroamino)methyl]amino]pentanamide hydrochloride. The hydrochloride was prepared by 2 methods, e.g. 90 % from N-[(1S)-1-[[[(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-3-methylbutyl]amino]carbonyl]-4-[[(imino)(nitroamino)methyl]amino]butyl]carbamic acid 1,1-dimethylethyl ester and HCl in dioxane/Et2O. The above intermediate was also prepared by 2 methods, e.g. 66 % from BocNH(NO2)ArgOH in anhydrous DMF, HATU, HOAt, N-methylmorpholine and [(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-3-methylbutyl]amine hydrochloride. This hydrochloride was prepared by 2 methods, e.g. 4 steps (94, 98, 100, 73%) starting from (+)-pinanediol and 2-methylpropylboronic acid and involving intermediates 2-(2-methylpropyl)-(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborole, 2-((1S)-1-chloro-3-methylbutyl)-(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborole, and N,N-Bis(trimethylsilyl)-(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-3-methylbutylamine.

IT **847496-58-6P 847496-74-6P 847498-76-4P 847498-96-8P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of boronic acids and esters as proteasome inhibitors for inducing apoptosis and treating cancer)

RN 847496-58-6 HCAPLUS

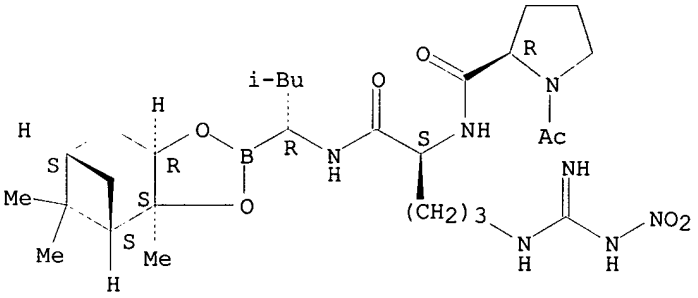
CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.



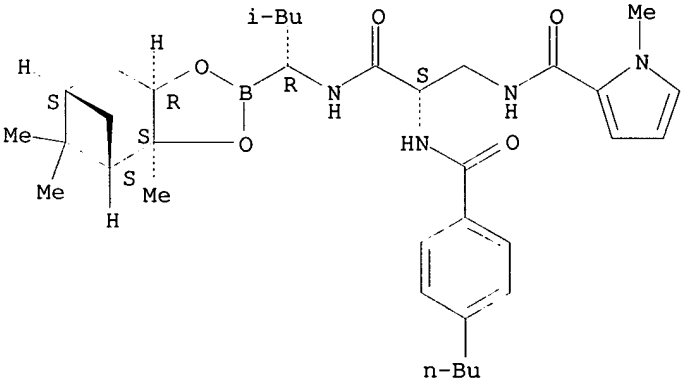
RN 847496-74-6 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.



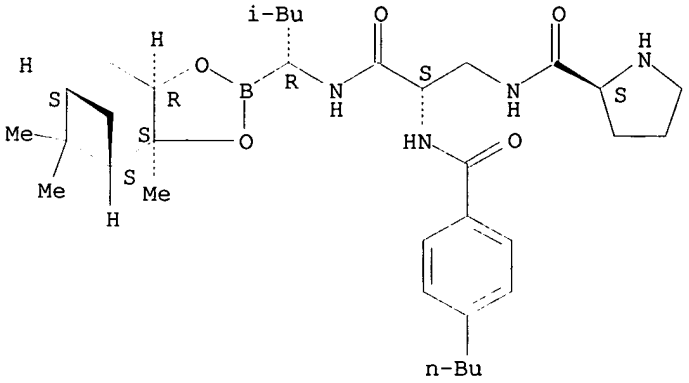
RN 847498-76-4 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.



RN 847498-96-8 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.



L33 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:55654 HCAPLUS
DOCUMENT NUMBER: 128:128288
TITLE: Preparation of bifunctional boron-containing peptides as thrombin inhibitors
INVENTOR(S): Deadman, John Joseph; Elgendy, Said; Green, Donovan; Skordalakes, Emmanuel; Scully, Michael Finbarr; Goodwin, Christopher Andrew; Kakkar, Vijay Vir
PATENT ASSIGNEE(S): Thrombosis Research Institute, UK
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9800443	A1	19980108	WO 1997-GB1575	19970611
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RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9730426	A1	19980121	AU 1997-30426	19970611
EP 910583	A1	19990428	EP 1997-925198	19970611
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JP 2000516203	T2	20001205	JP 1998-503898	19970611
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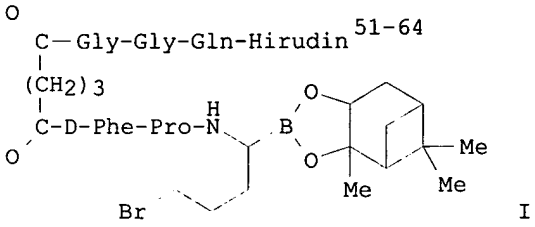

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Not Seq.

AB Bifunctional peptide thrombin inhibitors and methods of manufacture are provided. The inhibitors have an anion-binding exosite associating moiety joined to a catalytic site-directed moiety. A spacer peptide and nonpeptide linker moiety enable both the anion-binding exosite associating moiety and the catalytic site directed moiety to bind simultaneously to a thrombin mol. thereby permitting the treatment of thrombosis. Thus, boron-containing peptide conjugate I was prepared by standard solid-phase methods using 9-fluorenylmethoxycarbonyl (Fmoc) chemical to assemble the hirudin segment, followed by amidation with glutaric anhydride, and peptide coupling with the boron-containing tripeptide segment. I inhibited human α-thrombin with Ki = 0.000649 μM in an in vitro assay.

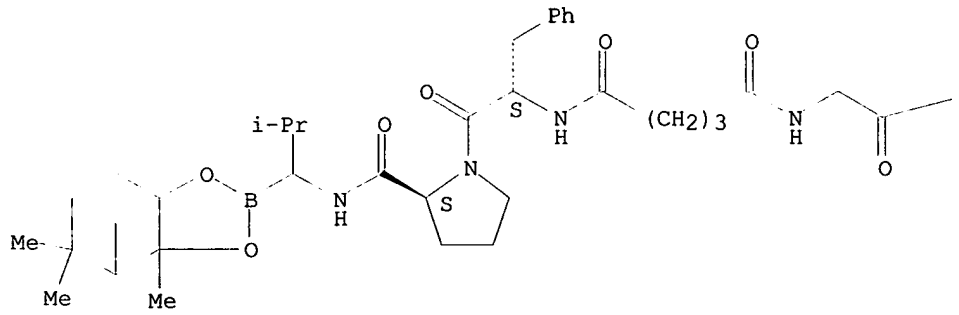
IT **202058-68-2P 202058-69-3P 202058-70-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of bifunctional boron-containing peptides as thrombin inhibitors)

RN 202058-68-2 HCAPLUS

CN L-Leucine, N-(4-carboxy-1-oxobutyl)glycylglycylglycylglycylglycyl-L-α-aspartyl-L-phenylalanyl-L-α-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-, (1→1')-amide with L-phenylalanyl-N-[1-(hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl)-2-methylpropyl]-L-prolinamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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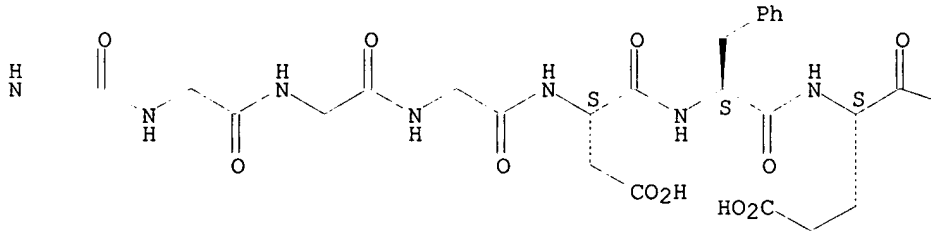

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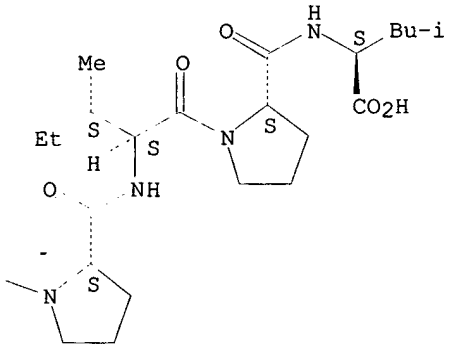

RN 202058-69-3 HCAPLUS
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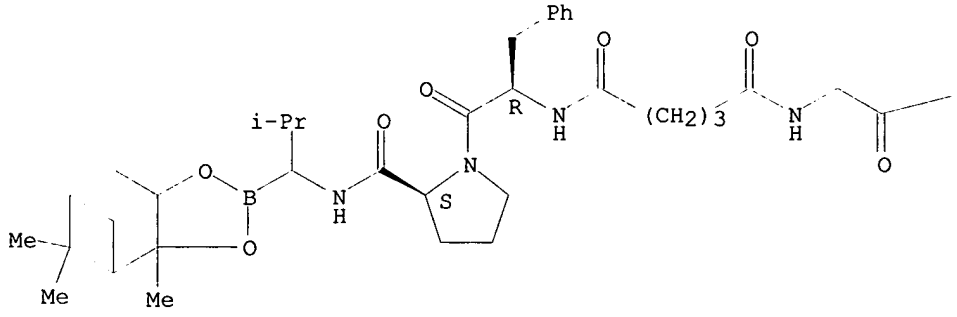
Absolute stereochemistry.

PAGE 1-A



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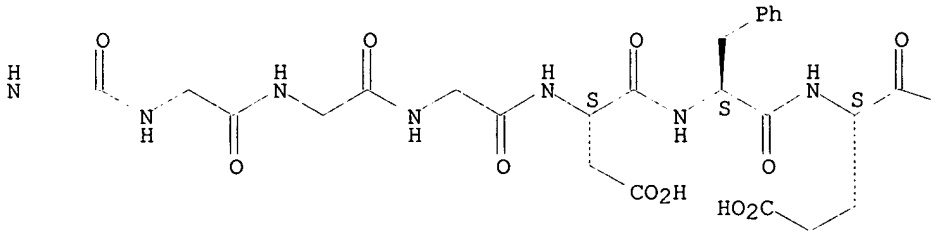

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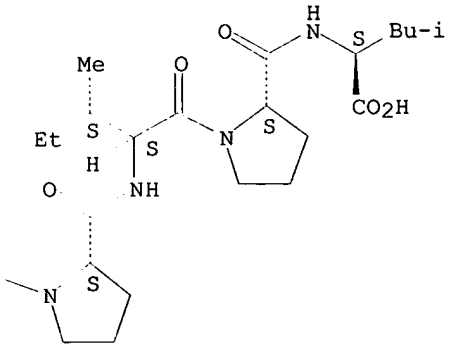

RN 202058-70-6 HCAPLUS
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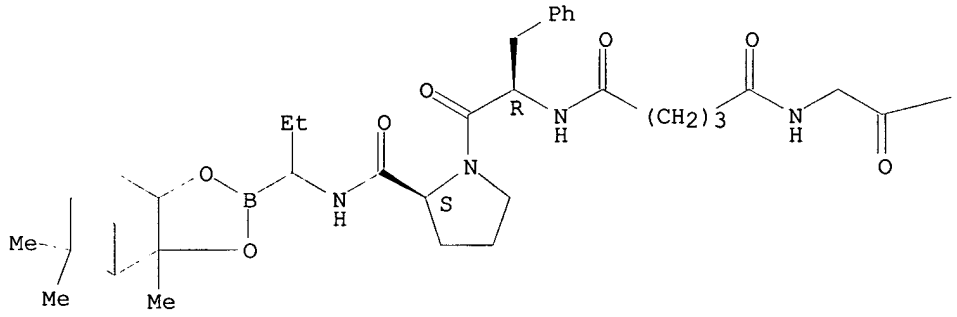
Absolute stereochemistry.

PAGE 1-A



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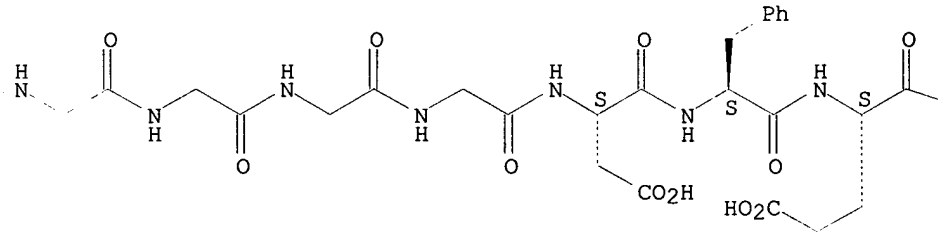

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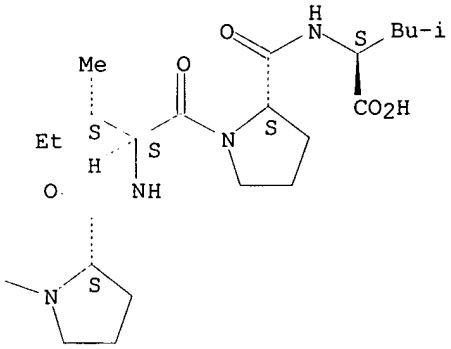

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L33 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:55653 HCAPLUS
DOCUMENT NUMBER: 128:128287
TITLE: Preparation of bifunctional boron-containing peptides as serine protease inhibitors
INVENTOR(S): Deadman, John Joseph; Elgendy, Said; Green, Donovan; Skordalakes, Emmanuel; Scully, Michael Finbarr; Goodwin, Christopher Andrew; Kakkar, Vijay Vir
PATENT ASSIGNEE(S): Thrombosis Research Institute, UK
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9800442	A1	19980108	WO 1997-GB1574	19970611
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RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
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AU 9730425	A1	19980121	AU 1997-30425	19970611
AU 729393	B2	20010201		
CN 1223664	A	19990721	CN 1997-195991	19970611
EP 935611	A1	19990818	EP 1997-925197	19970611
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
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MX 9810854	A	20000531	MX 1998-10854	19981216
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PRIORITY APPLN. INFO.: GB 1996-13719 A 19960629
WO 1997-GB1574 W 19970611

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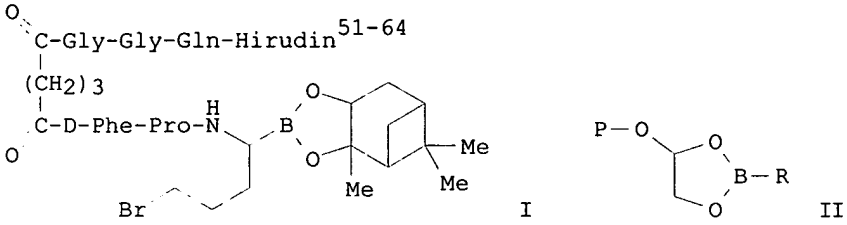


AB Bifunctional serine protease inhibitors and methods of preparing boron-containing peptides are provided. The serine protease inhibitors comprise a catalytic site-directed moiety, which binds to and inhibits the active site of a serine protease, and an exosite associating moiety, which are joined by a connector moiety. The catalytic site directed moiety and the exosite associating moiety are capable of binding simultaneously to a mol. of the serine protease. Thus, boron-containing peptide conjugate I was prepared by standard solid-phase methods using 9-fluorenylmethoxycarbonyl (Fmoc) chemical to assemble the hirudin segment, followed by amidation with glutaric anhydride, and peptide coupling with the boron-containing tripeptide segment. I inhibited human α-thrombin with Ki = 0.000649 μM in an in vitro assay. A novel solid-phase method for producing terminal boron-containing peptide analogs using resin-bound boradioxolane II (R = bora-amino acid residue; P = polymer support) is presented.

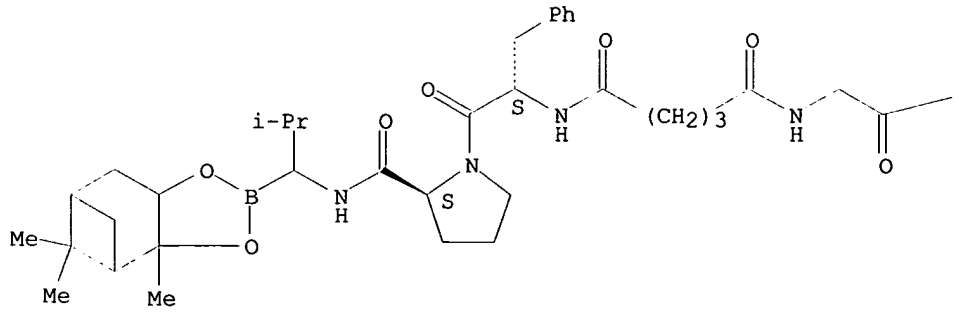
IT **202058-68-2P 202058-69-3P 202058-70-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of bifunctional boron-containing peptides as serine protease inhibitors)

RN 202058-68-2 HCAPLUS

CN L-Leucine, N-(4-carboxy-1-oxobutyl)glycylglycylglycylglycylglycyl-L-α-aspartyl-L-phenylalanyl-L-α-glutamyl-L-prolyl-L-isoleucyl-L-prolyl-, (1→1')-amide with L-phenylalanyl-N-[1-(hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl)-2-methylpropyl]-L-prolinamide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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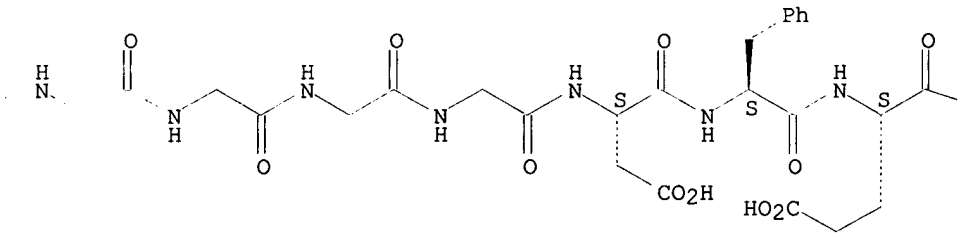

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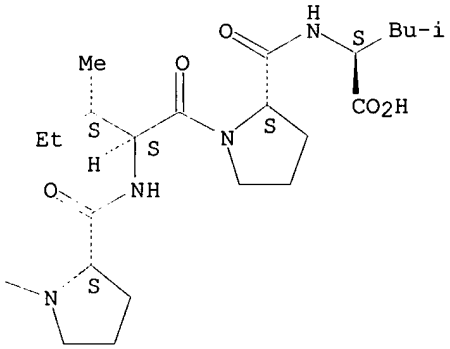

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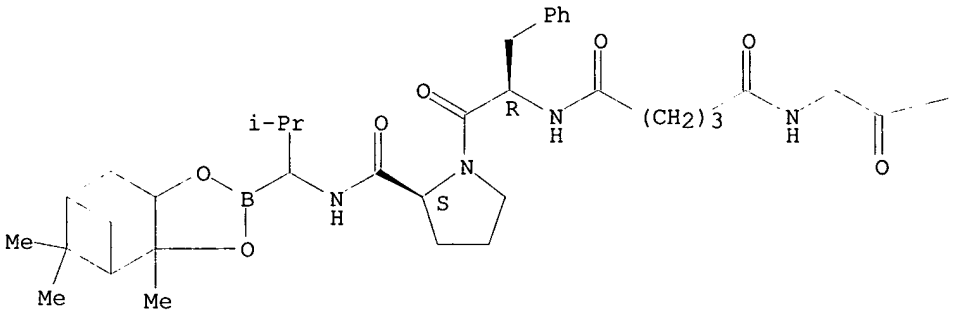
Absolute stereochemistry.

PAGE 1-A



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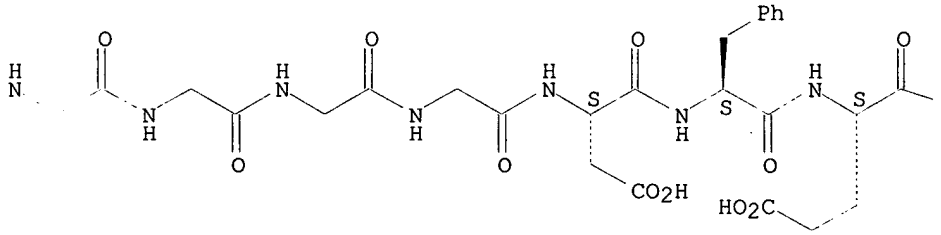

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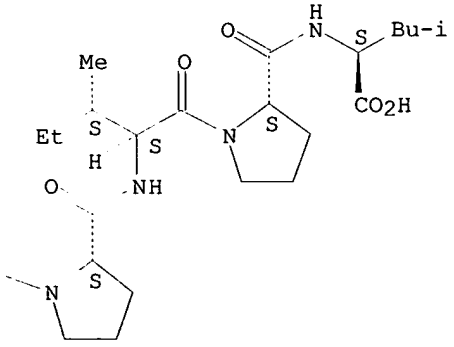

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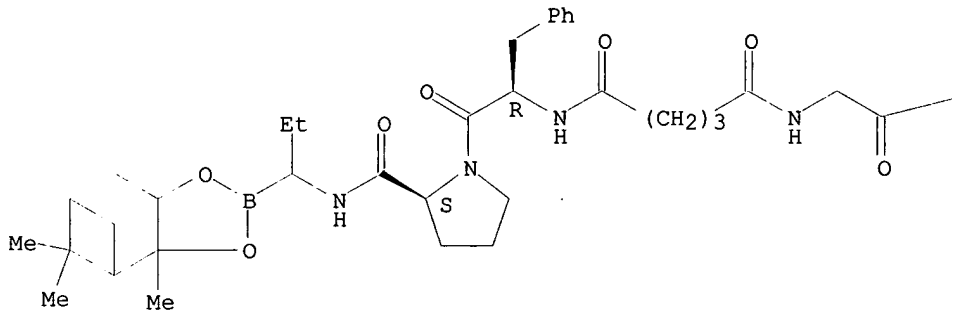
Absolute stereochemistry.

PAGE 1-A



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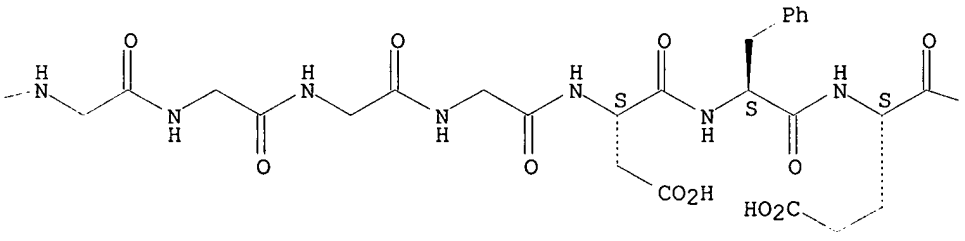

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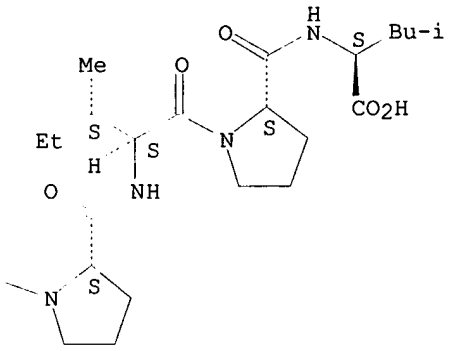

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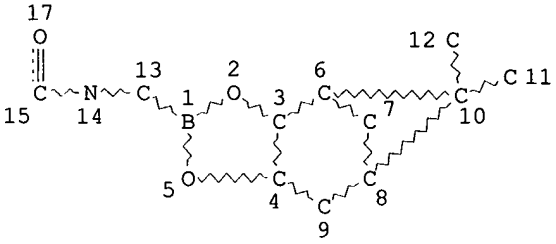

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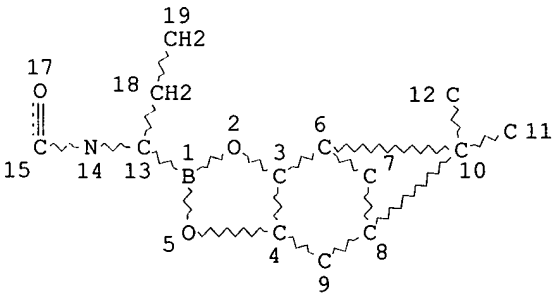

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L40            3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38


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L40  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2002:907216  HCAPLUS
DOCUMENT NUMBER:          138:4821
TITLE:                    Preparation of peptide inhibitors of hepatitis C virus
                          NS3 protein
```

APP 8

INVENTOR(S): Priestley, E. Scott
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 54 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002177725	A1	20021128	US 2001-39317	20011023
US 6846806	B2	20050125		
US 2004147483	A1	20040729	US 2004-759725	20040115
PRIORITY APPLN. INFO.:			US 2000-242557P	P 20001023 PP
			US 2001-39317	A3 20011028

OTHER SOURCE(S): MARPAT 138:4821

AB The invention relates to a novel class of peptides R3-A-N(R2)CHR1-W [W = B(OH)2 or a derivative, COCO-Q, COCONH-Q, COCO2-Q, COCF2CONH-Q, COCF3, COCF2CF3, or CHO, where Q is an amino acid residue or an alkyl, alkenyl, or alkynyl radical substituted by CO2H, SO2H, SO3H, PO2H, PO3H (or their esters), etc.; A is a (di- through hepta)peptide residue; R1 = R1a(CH2)2-6 (R1a = substituted phenyl), BuCH2, BuCH2CH2, Me3C(CH2)3, Et2CH(CH2)3, or 3-cyclobutylpropyl; R2 = H, alkyl, aryl, arylalkyl, or cycloalkyl; R3 = H, alkyl, aryl, arylalkyl, COR11, CO2R11, CONHR11, SOR11, SO2R11 (R11 = alkyl, aryl, or heterocyclyl which may be substituted), or an NH2-blocking group] which are useful as serine protease inhibitors, more particularly as hepatitis C virus (HCV) NS3 protease inhibitors. Thus, H-Asp-Glu-Val-Val-Pro-(R)-amino(phenyl)methylboronic acid (+)-pinanediol ester was prepared by solution phase chemical Compds. of the invention were found to exhibit a Ki of ≤ 50 μM, thereby confirming their utility as effective HCV NS3 protease inhibitors.

IT **476333-93-4P 476333-94-5P 476333-95-6P**
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476334-02-8P 476334-03-9P 476334-04-0P
476334-05-1P 476334-06-2P 476334-07-3P
476334-08-4P 476334-10-8P 476334-11-9P
476334-12-0P 476334-13-1P 476334-14-2P
476334-15-3P 476334-16-4P 476334-17-5P
476334-25-5P 476334-26-6P 476334-27-7P
476334-28-8P 476334-29-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptide inhibitors of hepatitis C virus NS3 protein)

IT **476334-34-6P 476334-38-0P 476334-42-6P**
476334-46-0P 476334-77-7P 476335-12-3P
476335-16-7P 476335-17-8P 476335-20-3P
476335-24-7P 476335-28-1P
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(preparation of peptide inhibitors of hepatitis C virus NS3 protein)

L40 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:767330 HCAPLUS
DOCUMENT NUMBER: 138:221813
TITLE: P1 Phenethyl peptide boronic acid inhibitors of HCV NS3 protease
AUTHOR(S): Priestley, E. Scott; De Lucca, Indawati; Ghavimi, Bahman; Erickson-Viitanen, Susan; Decicco, Carl P.
CORPORATE SOURCE: Experimental Station, Bristol-Myers Squibb Pharmaceutical Research Institute, Wilmington, DE, 19880-0500, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2002), 12(21), 3199-3202

CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of peptide boronic acids containing extended, hydrophobic P1 residues was prepared to probe the shallow, hydrophobic S1 region of HCV NS3 protease. The p-trifluoromethylphenethyl P1 substituent was identified as optimal with respect to inhibitor potency for NS3 and selectivity against elastase and chymotrypsin.
IT **500763-17-7P 500763-19-9P 500763-21-3P**
500763-23-5P 500763-25-7P 500763-27-9P
500763-29-1P 500763-31-5P 500763-33-7P
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500763-75-7P 500763-76-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of P1 phenethyl peptide boronic acid inhibitors of HCV NS3 protease)
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:31525 HCAPLUS
DOCUMENT NUMBER: 134:101193
TITLE: Preparation of peptide boronic acid inhibitors of hepatitis C virus protease
INVENTOR(S): Kettner, Charles A.; Jagannathan, Sharada; Forsyth, Timothy Patrick
PATENT ASSIGNEE(S): Du Pont Pharmaceuticals Company, USA
SOURCE: PCT Int. Appl., 258 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002424	A2	20010111	WO 2000-US18655	20000707
WO 2001002424	A3	20010719		
W: AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2376965	AA	20010111	CA 2000-2376965	20000707
AU 2000057888	A5	20010122	AU 2000-57888	20000707
EP 1196436	A2	20020417	EP 2000-943413	20000707
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: US 1999-142561P P 19990707
WO 2000-US18655 W 20000707
OTHER SOURCE(S): MARPAT 134:101193
AB α-Aminoboronic acids and corresponding peptide analogs R3-A-NR2CHR1BY1Y2 [Y1, Y2 = OH, F, an amino group, alkoxy or BY1Y2 is a cyclic boron ester, amide or amide-ester; R1 = CH:CH2, CH2CH:CH2, CH:CHCH3, C.tplbond.CH, C.tplbond.CCH3, CH2C.tplbond.CH, cyclopropyl, cyclopropylmethyl, cyclobutyl, cyclobutylmethyl, mercaptoalkyl, alkyldithioalkyl, etc.; A is a bond, a natural or unnatural amino acid residue, or a peptide residue comprising 2-10 amino acids; R2 = H, alkyl,

aryl, arylalkyl, cycloalkyl; R3 = H, alkanoyl, alkyl, alkenyl, alkynyl, aryl, carbalkoxy, alkylsulfinyl, alkylsulfonyl, carbamoyl, etc.] were prepared for the treatment of hepatitis C viral infections. Thus, Boc-Asp(OBu-t)-Glu(OBu-t)-Val-Val-Pro-boroCpa-OH pinanediol ester (Boc = tert-butoxycarbonyl, boroCpa is L-2-amino-3-cyclopropylboronic acid residue) was prepared by standard methods of peptide coupling in solution Enzyme assays, dosages and formulations are discussed.

IT **319010-27-0P 319010-29-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of peptide boronic acid inhibitors of hepatitis C virus protease)

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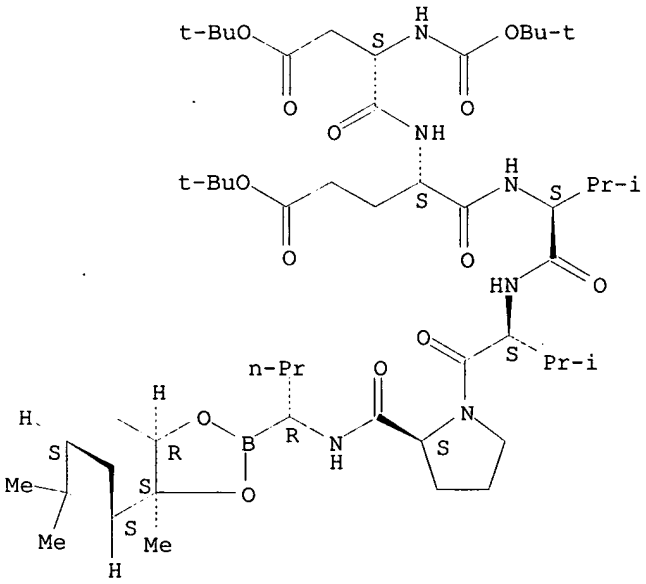
L40 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN
IT **319010-27-0P 319010-29-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of peptide boronic acid inhibitors of hepatitis C virus protease)
RN 319010-27-0 HCAPLUS
CN L-Prolinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]butyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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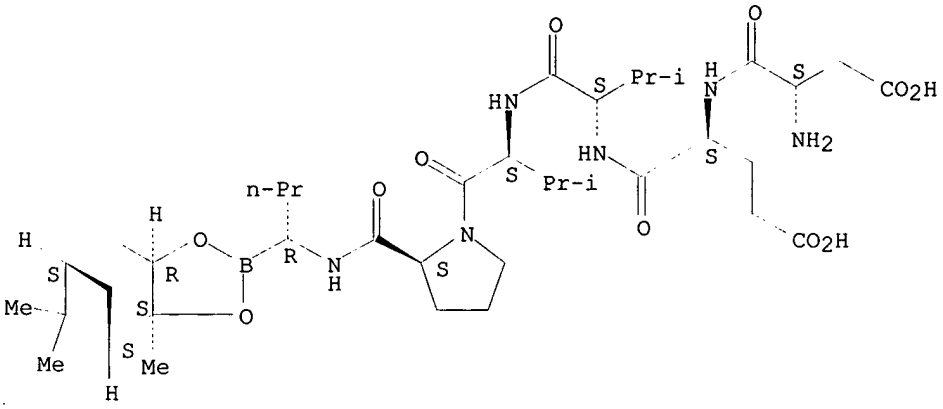
Absolute stereochemistry.



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E1 THROUGH E72 ASSIGNED

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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STRUCTURE FILE UPDATES:   31 MAR 2005  HIGHEST RN 847735-80-2
DICTIONARY FILE UPDATES:  31 MAR 2005  HIGHEST RN 847735-80-2

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

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*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
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Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

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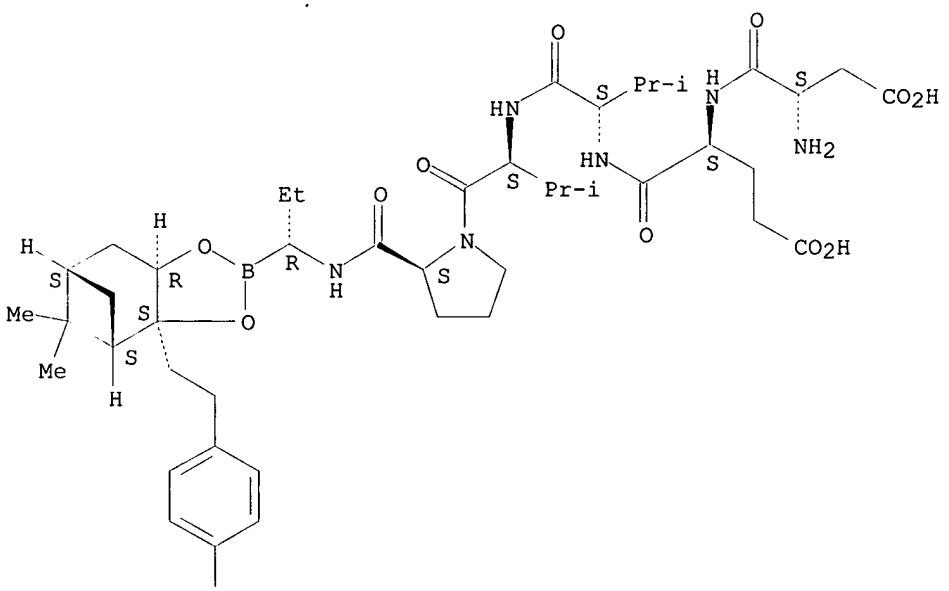
Absolute stereochemistry.

PAGE 1-A



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REFERENCE 1: 138:221813

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ED Entered STN: 27 Mar 2003
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NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
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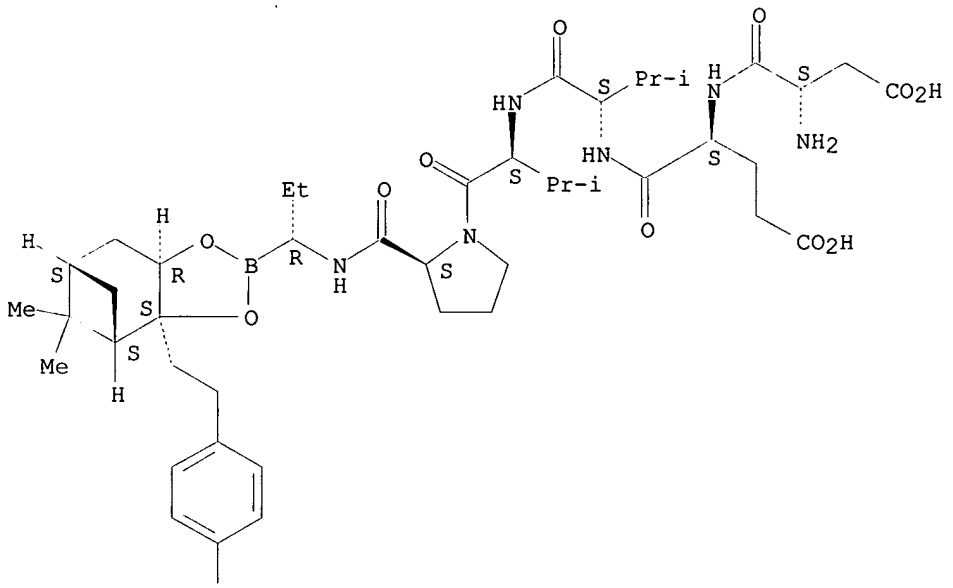
Absolute stereochemistry.

PAGE 1-A



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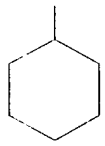

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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FS PROTEIN SEQUENCE; STEREOSEARCH
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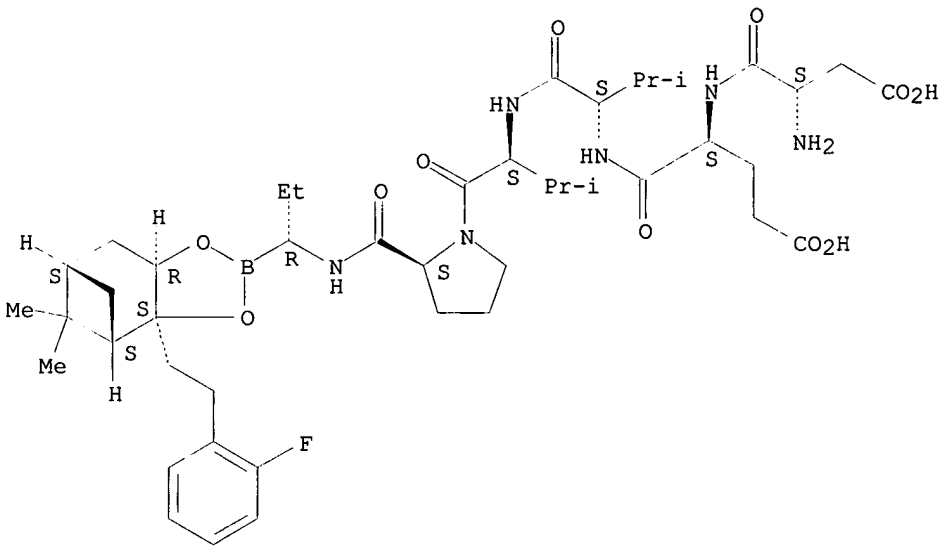
LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



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REFERENCE 1: 138:221813

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ED Entered STN: 27 Mar 2003
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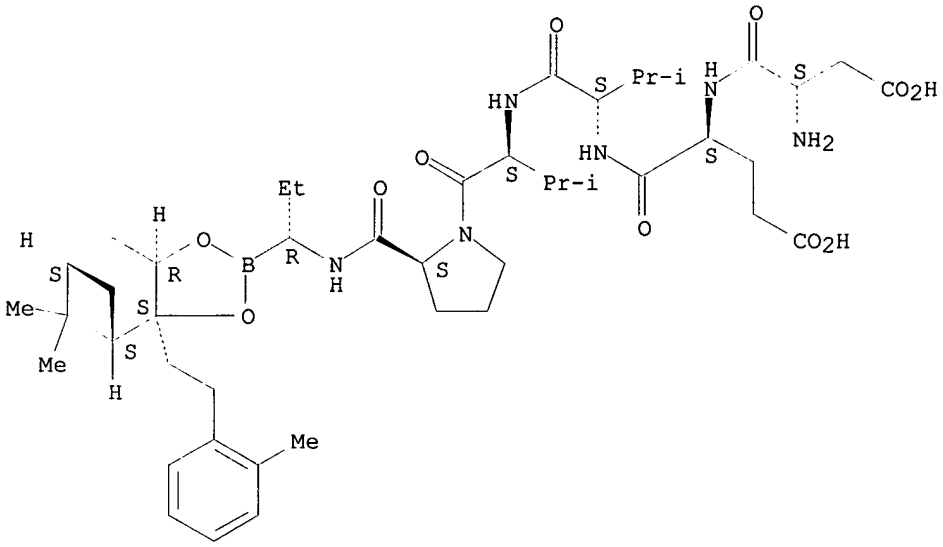
MF C45 H69 B N6 O11
SR CA
LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:221813

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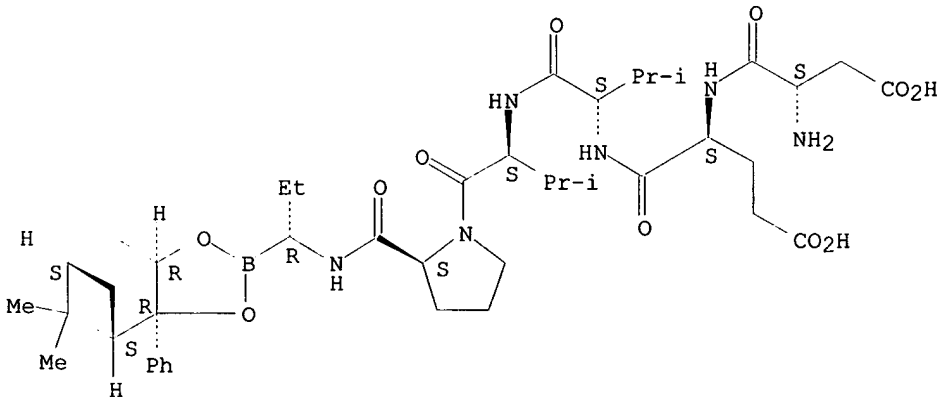
CN L-Prolinamide, L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-1-[(3aR,4S,6S,7aR)-hexahydro-5,5-dimethyl-3a-phenyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]propyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C42 H63 B N6 O11
SR CA
LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



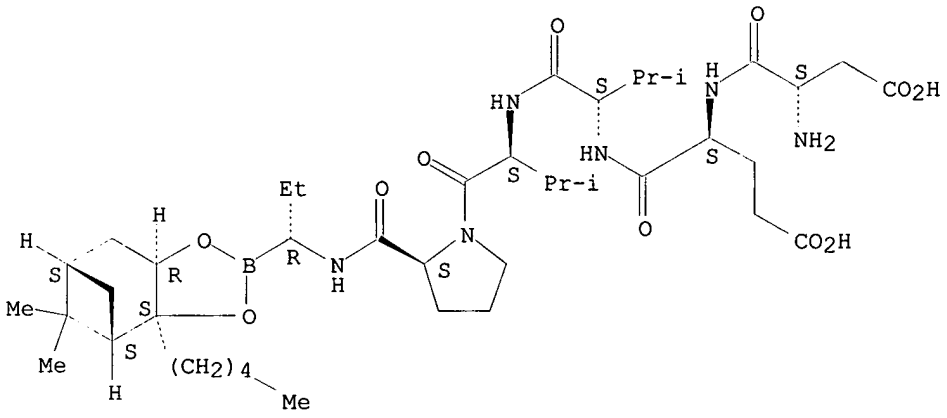
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:221813

L41 ANSWER 30 OF 72 REGISTRY COPYRIGHT 2005 ACS on STN
RN **500763-21-3** REGISTRY
ED Entered STN: 27 Mar 2003
CN L-Prolinamide, L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-5,5-dimethyl-3a-pentyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]propyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C41 H69 B N6 O11
SR CA
LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



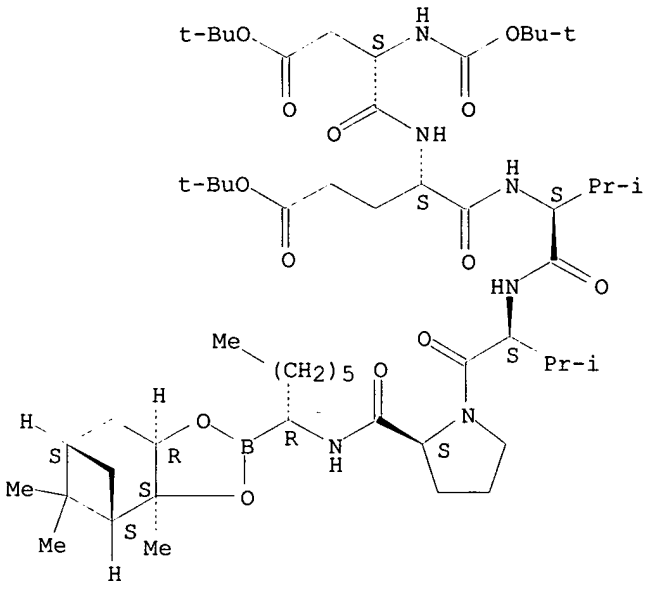
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:221813

L41 ANSWER 35 OF 72 REGISTRY COPYRIGHT 2005 ACS on STN
RN **476335-20-3** REGISTRY
ED Entered STN: 16 Dec 2002
CN L-Prolinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]heptyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C54 H93 B N6 O13
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

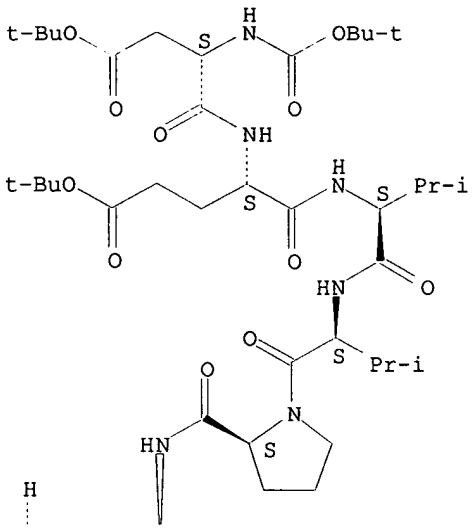
REFERENCE 1: 138:4821

L41 ANSWER 40 OF 72 REGISTRY COPYRIGHT 2005 ACS on STN
RN **476334-46-0** REGISTRY
ED Entered STN: 16 Dec 2002
CN L-Prolinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-3-(2-naphthalenyl)propyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C60 H91 B N6 O13
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

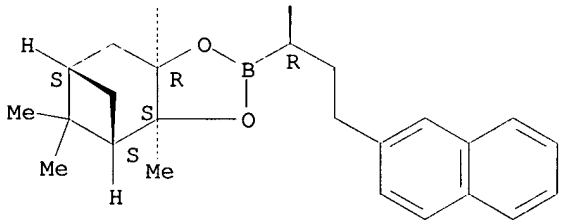
RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

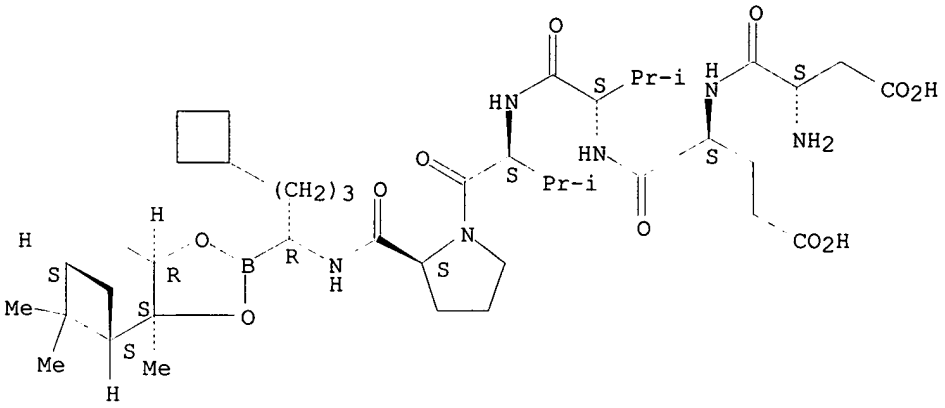
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:4821

L41 ANSWER 45 OF 72 REGISTRY COPYRIGHT 2005 ACS on STN
RN **476334-28-8** REGISTRY
ED Entered STN: 16 Dec 2002
CN L-Prolinamide, L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-4-cyclobutyl-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]butyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C42 H69 B N6 O11
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

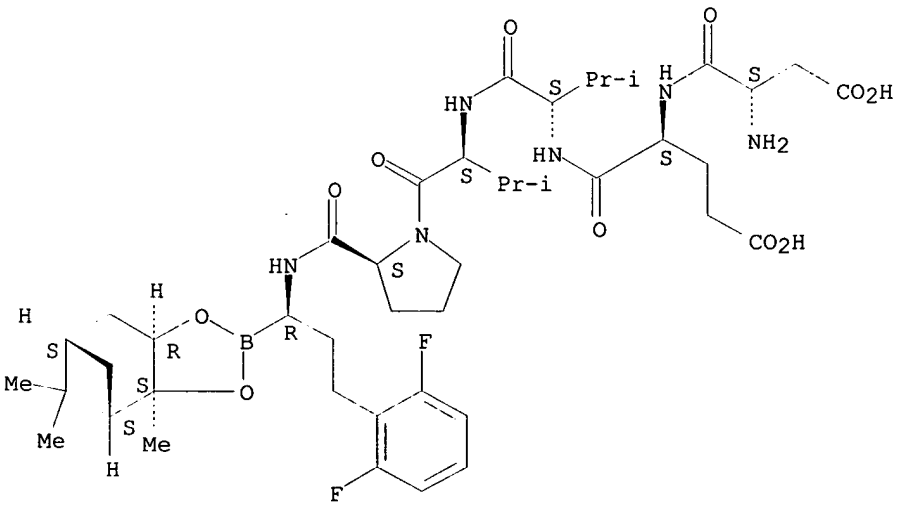
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:4821

L41 ANSWER 50 OF 72 REGISTRY COPYRIGHT 2005 ACS on STN
RN **476334-16-4** REGISTRY
ED Entered STN: 16 Dec 2002
CN L-Prolinamide, L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-3-(2,6-difluorophenyl)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]propyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C43 H63 B F2 N6 O11
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

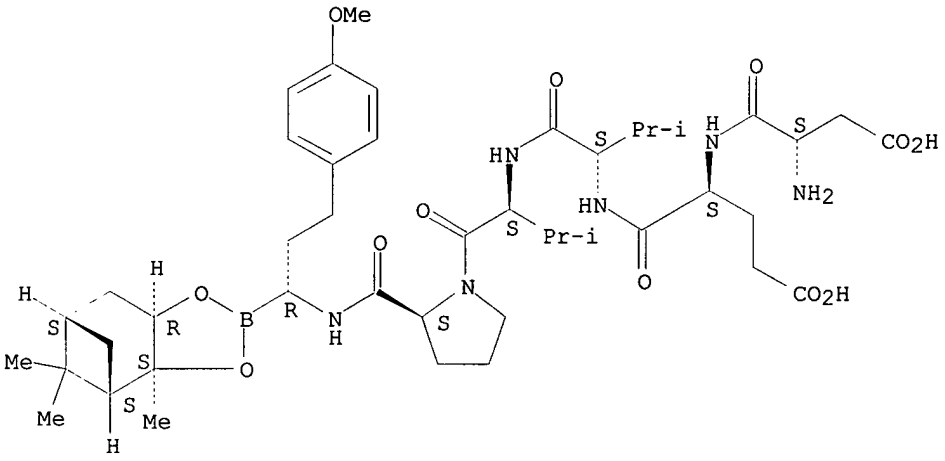
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:4821

L41 ANSWER 55 OF 72 REGISTRY COPYRIGHT 2005 ACS on STN
RN **476334-11-9** REGISTRY
ED Entered STN: 16 Dec 2002
CN L-Prolinamide, L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-3-(4-methoxyphenyl)propyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C44 H67 B N6 O12
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

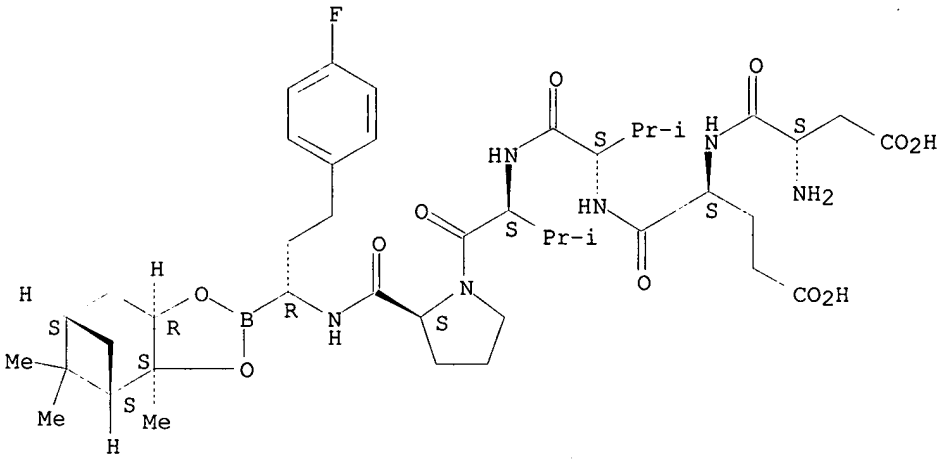
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:4821

L41 ANSWER 60 OF 72 REGISTRY COPYRIGHT 2005 ACS on STN
RN **476334-05-1** REGISTRY
ED Entered STN: 16 Dec 2002
CN L-Prolinamide, L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-3-(4-fluorophenyl)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]propyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C43 H64 B F N6 O11
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

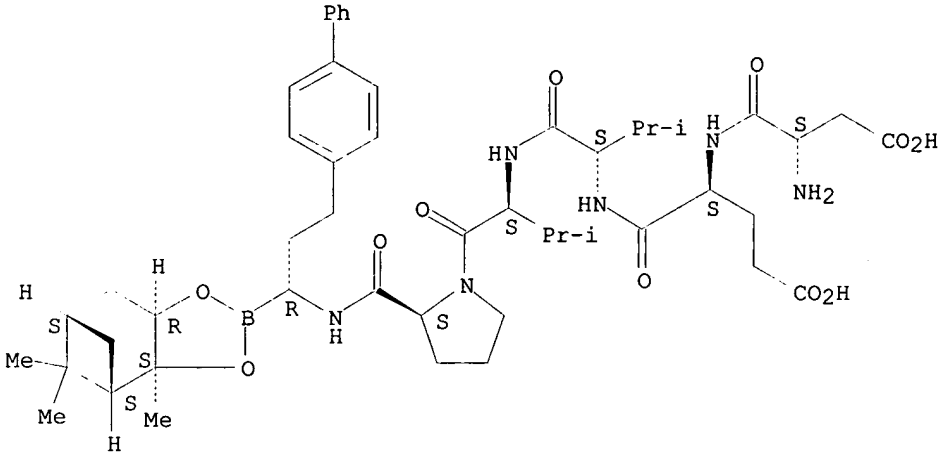
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:4821

L41 ANSWER 65 OF 72 REGISTRY COPYRIGHT 2005 ACS on STN
RN **476334-00-6** REGISTRY
ED Entered STN: 16 Dec 2002
CN L-Prolinamide, L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-3-[1,1'-biphenyl]-4-yl-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]propyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C49 H69 B N6 O11
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

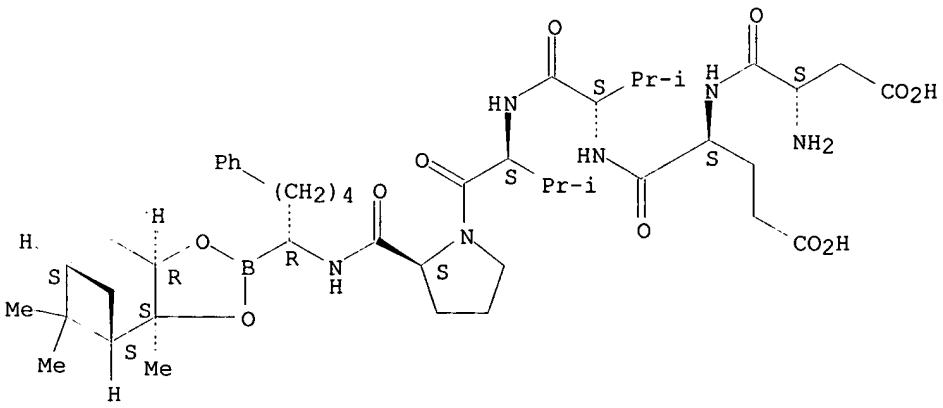
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:4821

L41 ANSWER 70 OF 72 REGISTRY COPYRIGHT 2005 ACS on STN
RN **476333-95-6** REGISTRY
ED Entered STN: 16 Dec 2002
CN L-Prolinamide, L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-5-phenylpentyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C45 H69 B N6 O11
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

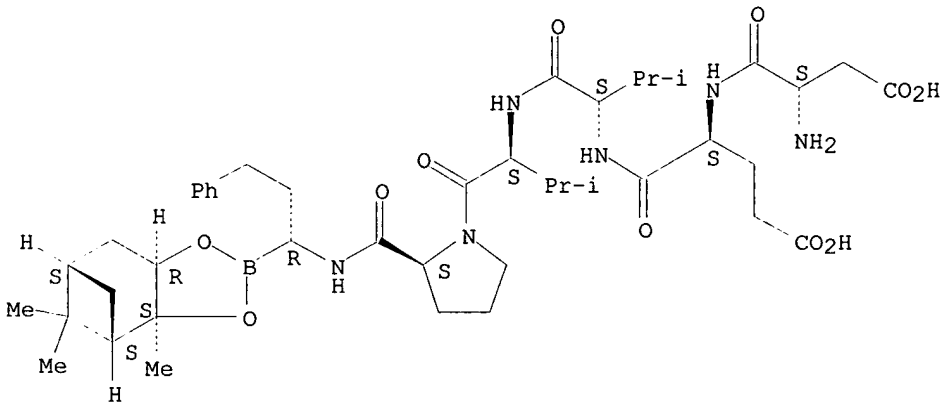
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:4821

L41 ANSWER 72 OF 72 REGISTRY COPYRIGHT 2005 ACS on STN
RN **476333-93-4** REGISTRY
ED Entered STN: 16 Dec 2002
CN L-Prolinamide, L-α-aspartyl-L-α-glutamyl-L-valyl-L-valyl-N-[(1R)-1-[(3aS,4S,6S,7aR)-hexahydro-3a,5,5-trimethyl-4,6-methano-1,3,2-benzodioxaborol-2-yl]-3-phenylpropyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C43 H65 B N6 O11
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:4821

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